APT 34 AMOT

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Claims

- 1. A mat with a textile surface and an elastomer backing that includes elastomer crumbs, a binder and a plurality of voids between the elastomer crumbs, such that the backing has a density in the range 0.5 to 0.9g/cm³, characterised in that the mat includes a rubber crumb border that extends beyond the periphery of the textile surface along at least two edges of the mat.
- 2. A mat according to claim 1 wherein the elastomer crumb is crumbed vulcanised rubber.
- 3. A mat according to claim 2 wherein the rubber is nitrile rubber.
- 4. A mat according to any preceding claim wherein the elastomer backing has a bulk density less than the solid density of the elastomer crumb material.
- 5. A mat according to claim 4, characterised in that the elastomer backing has a bulk density in the range 45 to 70%, preferably 55 to 70%, of the solid density of the elastomer crumb material.
- 6. A mat according to any preceding claim, characterised in that the backing has a density in the range 0.7 to 0.9g /cm³.
- 7. A mat according to any preceding claim, characterised in that the elastomer backing exhibits a deformability, as measured by the test herein defined, of at least 14%, preferably 14 to 50%, more preferably 14 to 25%.
- 8. A mat according to any preceding claim, characterised in that the elastomer backing exhibits a tear resistance strength of at least 0.8 N/mm².
- A mat according to any preceding claim in which the backing has a thickness of at least 1 mm.
- 10. A mat according to any preceding claim in which the crumb size is less than 5 mm diameter and is preferably substantially in the range 2 to 4 mm.
- 11. A mat according to any preceding claim in which the elastomer crumb backing includes at least 10% by weight powdered elastomer crumb.
- 12. A mat according to any preceding claim in which the binder is present at a level of from 2 to 20%.

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- APT 34 RAIDT A mat according to claim 12, in which the elastomer crumb backing includes less than 1% by weight powdered elastomer crumb and the binder is present at a level of from 2 to 12%.
 - A mat according to claim 12, wherein the elastomer crumb backing includes at least 10% 14. by weight powdered elastomer crumb and the binder level lies in the range 9 to 20%, preferably about 14%.
 - A mat according to any preceding claim in which the binder is a polyurethane MDI binder. 15.
 - 16. A mat according to claim 15 in which the binder is selected from the group consisting of 4,4-methylene di-p-phenylene isocyanate (MDI) polyurethane one- and two-component adhesives.
 - 17. A mat according to claim 16 in which the binder is a solvent free one component polyurethane adhesive.
 - A mat according to any one of claims 1 to 14 in which the binder is a hot melt binder. 18.
 - A mat according to any preceding claim in which the backing includes powdered additives selected from the group consisting of anti-microbial additives, anti-flammability additives, pigments, such as iron oxide, and anti-static additives, such as carbon fibres.
 - 20. A mat according to any preceding claim comprising a crumb rubber border extending around the entire periphery of the mat.
 - 21. A mat according to any preceding claim, characterised in that the unwashed textile surface has a sand retention value of at least 1000 g/m².
 - 22. A mat according to any preceding claim, characterised in that the textile surface comprises a tufted pile textile, including tufts of yarn tufted into a tufting substrate.
 - A mat according to any preceding claim, characterised in that the textile surface comprises 23. a knitted, woven or non-woven textile, or a flock surface.
 - A mat according to any preceding claim, wherein an edging strip is bonded to the elastomer backing adjacent at least one edge thereof.
 - 25. A mat according to claim 24, wherein the textile surface partially overlaps and is bonded to the edging strip.
 - A mat according to any preceding claim, which is a floor mat.
 - A mat according to any one of claims 1 to 25, which is a table mat.

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28. A mat according to any one of claims 1 to 25, which is a bar runner.